

WE CLAIM:

1. A mixing system for mixing a plurality of constituents comprising:
a collar configured for coupling to at least two containers;
a head including a cartridge coupled to the collar;
the cartridge including a plenum, a mixing canal, and an outlet, that are connected to pass and mix the plurality of constituents upon release of the plurality of constituents from the at least two containers; and
the mixing canal including a plurality of columns for facilitating the mixing.
2. The system of claim 1, wherein the head further includes a lever to activate the release of the plurality of constituents into the plenum and thereby mix the constituents in the cartridge to provide a thoroughly mixed product comprised of the plurality of constituents.
3. The system of claim 1, wherein the collar further includes a plurality of openings sized to hold the at least two containers.
4. The system of claim 1, wherein the cartridge further includes a plurality of input ports proceeding to the plenum, each input port passing a respective one of the plurality of constituents.
5. The system of claim 1, wherein the columns are cylindrical.
6. The system of claim 1, wherein the columns are fin-shaped.
7. The system of claim 1, further comprising a base configured for receiving the at least two containers and securing the containers within the base.
8. A cartridge for mixing constituents comprising:
a plenum in fluid communication with a plurality of constituents;
a mixing canal in fluid communication with the plenum and into which the constituents flow and are mixed;

a plurality of columns disposed within the mixing canal to promote turbulent flow within the mixing canal; and
an outlet through which the mixed constituents pass.

9. The system of claim 8, wherein the columns are cylindrical.

10. The system of claim 8, wherein the columns are oval.

11. A method of producing a mixing device for a plurality of constituents comprising the steps of:

molding a head piece, cartridge piece and a cover piece;
the cartridge piece including a mixing chamber;
the mixing chamber including a plurality of columns integrally formed on the cartridge piece; and
fitting the cover piece onto the cartridge piece and the cartridge piece into the head piece, wherein the cover piece seals an enclosed space of the mixing chamber.

12. A method of producing a mixing device of claim 11, wherein the step of molding the cover piece comprises a step of integrally molding, onto the cartridge piece, input ports configured for each receiving one of the plurality of constituents, a plenum coupled to the input ports at one end and to the mixing chamber at another end, and an outlet coupled to the mixing chamber.

13. A method of producing a mixing device of claim 11, wherein the step of molding further includes a step of integrally molding a lever with the cartridge piece.

14. A method of mixing a plurality of chemicals from pressurized containers comprising the steps of:
actuating a plurality of actuators to release a plurality of constituents;
separately passing each of the plurality of constituents into a cartridge;

passing the plurality of constituents around a plurality of columns, thoroughly mixing the constituents; and
ejecting the thoroughly mixed constituents.

15. The method of claim 14, wherein the columns are cylindrical.

16. The method of claim 14, wherein the columns are oval.

17. A mixing system comprising:

means for activating a plurality of actuators to release a plurality of constituents;

means for separately passing each of the plurality of constituents into a mixing means;

means for mixing the plurality of constituents comprising a plurality of columns;

and

means for ejecting the thoroughly mixed constituents.

18. The system of claim 17, wherein the columns are cylindrical.

19. The system of claim 17, wherein the columns number about 10 to about 50.